

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
RENEWAL

PERMITTEE

Chicago Extruded Metals Company
Attn: Joy Redford
1601 South 54th Avenue
Cicero, Illinois 60804

Application No.: 72090321 I.D. No.: 031051AAZ
Applicant's Designation: EXTRUSION Date Received: April 27, 2001
Subject: Copper and Copper Alloy Extrusion
Date Issued: July 31, 2001 Expiration Date: July 31, 2006
Location: 1601 South 54th Avenue, Cicero

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three electric induction furnaces (2-melting and 1-holding) controlled by baghouse, three pickling lines, chip dryer with an afterburner and a baghouse pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emission of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for VOM, 10 tons/year of a single HAP, 25 tons/year for totaled HAP and 100 tons/year of PM₁₀), as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
2. This permit is issued based on no beryllium in any of the raw materials processed at the plant, thereby exempting the source from National Emission Standards for Hazardous Air Pollutants (NESHAP), Part 61, Subpart C.
- 3a. Emissions and operation of chip dryer shall not exceed the following limits:

Oil Evaporated		VOM Emissions	
(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)
120	1,000	2.38	20

These limits are based on maximum oil evaporated in chip dryer, all oil evaporated are VOM, 98% control of burned oil by afterburner and emissions were determined based on stack test. The percentage of oil in the chip will be determined from in-house laboratory analysis of chip sample of each shipment prior to blending with other shipment and feeding into chip dryer.

- b. Compliance with annual limits shall be determined from a running total of 12 months of data.
- 4a. Operation and emissions of natural gas combustion units shall not exceed the following limits:

Natural Gas Consumption		VOM		E M I S S I O N S		E M I S S I O N S		E M I S S I O N S	
(scf/Mo)	(scf/Yr)	(T/Mo)	(T/Yr)	NO _x		CO		PM	
		(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)
29 x 10 ⁶	290 x 10 ⁶	0.08	0.8	1.5	14.5	1.2	12.2	0.1	1.1

These limits defines the maximum fuel combustion (natural gas) emissions from the gas combustion units and is based on standard AP-42 emission factors.

- b. Natural gas shall be the only fuel used at this plant.
- c. Compliance with annual limits shall be determined from a running total of the previous 12 months of data.
- 5a. Emissions and operation of the 3 electric induction furnaces shall not exceed the following limits:

Process Weight Rate	Production Rate		PM Emissions	
(Tons/Hr)	(T/Mo)	(T/Yr)	(T/Mo)	(T/Yr)
10	10,834	65,000	6.1	61.4

These limits are based on potential process weight rate and an AP-42 emission factor of 0.7 lb/ton.

- b. Compliance with annual limits shall be determined from a running total of 12 months of data.
- 6. This permit is issued based on emissions of particulate matter (PM) not exceeding the limits determined by 35 Ill. Adm. Code 212.322.
- 7. This permit is also issued based on emissions of carbon monoxide (CO) from any fuel combustion emission source not exceeding 200 ppm corrected to 50% excess air, pursuant to 35 Ill. Adm. Code 216.121.
- 8. This permit is also issued based on emissions of sulfur dioxide from any fuel combustion emission source not exceeding the limits determined by 35 Ill. Adm. Code 214.161.

9. This permit is also issued based on negligible emissions of PM and SO₂ from each of the 3 pickling lines. For this purpose, emissions of each pollutant from each line shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.
10. This permit is also issued based on emissions of sulfuric acid and/or sulfuric trioxide not exceeding 0.1 lb/hour from the 3 pickling lines, pursuant to 35 Ill. Adm. Code 214.303.
11. This permit is also issued based on emissions of sulfur dioxide (SO₂) from any emission unit not exceeding 2,000 ppm pursuant to 35 Ill. Adm. Code 214.301.
- 12a. The afterburner shall be equipped with a continuous temperature indicator and strip chart recorder or disk storage or circular record charts for the thermal oxidizer combustion chamber temperature. The Permittee shall retain all records of equipment operation and strip charts or disk storage for at least three years from the date of occurrence. These records shall be available for inspection by the Illinois EPA.
- b. The afterburner combustion chamber shall be preheated to the manufacturer's recommended temperature but not lower than 1300°F, before the chip dryer process is begun; this temperature shall be maintained during the chip dryer operation.
- c. The alternative method specified below only be used during a malfunction or breakdown of continuous temperature indicator of afterburner.
 - i. In the event continuous indicator system can not be used, the electronic data recording system shall be used which must obtain temperature every fifteen minutes.
 - ii. In the event of malfunction or breakdown of continuous temperature indicator, the Permittee shall repair and recalibrate the meter or monitor as soon as practicable but no later than 10 days after the malfunction or breakdown is detected, unless prior Illinois EPA approval is obtained by submitting adequate justification to the Illinois EPA detailing the reasons for delay. Records of repair and recalibration must be maintained in accordance with the recordkeeping requirements of this permit. This condition does not relieve the Permittee of the minimum data obtaining requirements of this permit.
13. The Permittee shall maintain records of the following items:
 - a. Chip dryer oil evaporated (tons/mo and tons/year);
 - b. Natural gas consumption (scf/mo and scf/year);

- c. Process weight rate of 3 electric induction furnaces (tons/mo and tons/year);
 - d. Brass production rate (tons/mo and tons/year);
 - e. Records of combustion chamber temperature;
 - f. Maintenance records of all control equipment;
 - g. MSDS of all materials;
 - h. VOM, NO_x, PM, HAP emissions (tons/mo and tons/year); and
 - i. Record of analysis of chip samples.
- 14a. Operation in excess of the applicable emission standards during malfunction and breakdown is allowed. This allowance applies only to the following specific equipment: 3 electric induction furnaces.
- b. In the event of a malfunction or breakdown of control equipment for the casting operation, the current active charge (batch) can be completed prior to the shutdown of the furnace.
 - c. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.
 - d. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:
 - i. Date and duration of malfunction or breakdown;
 - ii. A full and detailed explanation of the cause for such emissions;
 - iii. The contaminants emitted and an estimate of the quantity of emissions;
 - iv. The measures used to reduce the quantity of emissions and the duration of the occurrence; and
 - v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
15. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from

this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.

16. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
17. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
18. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations or standard operational and maintenance practice developed by the Permittee, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
19. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
1340 North Ninth Street
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

20. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: chip dryer oil evaporated (ton/mo and ton/yr), record of percentage of oil in chip sample, brass production (ton/mo and ton/year), and record of combustion

chamber temperature, natural gas consumption (mmscf/mo and mmscf/yr), process weight rate of 3 electric induction furnaces (tons/mo and tons/yr). If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

21. Your request to operate the chip dryer in excess of the applicable emission standards during malfunction and breakdown is denied for the following reasons: The application does not fulfill the requirement of 35 Ill. Adm. Code 201.262.

If you have any questions on this permit, please call Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

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Enclosure/Attachment

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the extruded brass metal product manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. This plant will produce 65,000 tons/year of brass product, evaporate 1000 tons/year of oil throughput and will combust 290 mmft³/yr of natural gas. The resulting maximum emissions are below the levels, e.g., 25 ton/yr of VOM, 100 tons/year of PM₁₀, 25 tons/yr of combined HAPs, and 10 tons/yr of each single HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program.

1. Emissions from the plant:

a. Chip Dryer

<u>Oil Throughput</u> <u>(Ton/Year)</u>	<u>VOM Emissions</u> <u>(Ton/Year)</u>
1000	20

b. 3 Electric Induction Furnaces

<u>Brass Product Rate</u> <u>(Ton/Year)</u>	<u>PM Emissions</u> <u>(Ton/Year)</u>
65,000	61.4

c. Fuel combustion emissions:

<u>Natural Gas Consumption</u> <u>scf/yr</u>	<u>E</u> <u>NO_x</u> <u>(T/Yr)</u>	<u>M</u>	<u>I</u> <u>CO</u> <u>(T/Yr)</u>	<u>S</u>	<u>S</u> <u>VOM</u> <u>(T/Yr)</u>	<u>I</u>	<u>O</u>	<u>N</u>	<u>S</u> <u>PM</u> <u>(T/Yr)</u>
290 x 10 ⁶	14.5		12.2		0.8				1.1

2. This permit is issued based on negligible emissions of PM and SO₂ from each of the 3 pickling lines. For this purpose, emissions of each pollutant from each line shall not exceed nominal rates of 0.1 lb/hr and 0.44 ton/yr.

3. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.

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